REMARKS

A Supplemental Information Disclosure Statement is submitted herewith.

In the Office Action dated April 6, 2005, claims 1 and 3-48 were rejected under 35 U.S.C. § 103(a) over U.S. Patent No. 6,430,556 (Goldberg) in view of U.S. Patent No. 6,507,842 (Grey).

Claims 1, 14, 28, 34, 45, and 48 have been cancelled, without prejudice, to render the rejection of the claims moot.

Claim 3 has been amended from dependent form to independent form, with the scope of the claim remaining *unchanged.* Claim 3 recites a method that comprises presenting a user interface in a test system; receiving user selection through the user interface pertaining to environment information of a target database system to extract; receiving, by the test system, the environment information extracted based on the user selection from the target database system, wherein the test system is separate from the target database system; and emulating the target database system in the test system using the received environment information.

It is respectfully submitted that a *prima facie* case of obviousness has not been established with respect to claim 3 for at least the reason that the hypothetical combination of Goldberg and Grey does not teach or suggest *all* elements of the claim. *See* MPEP § 2143 (8th ed., Rev. 2), at 2100-129.

Goldberg describes using a GUI 302 to aid the user in formulating a query which is consistent with a database schema. Also, Goldberg describes a query object generator tool that uses a database schema access object 316 for obtaining database schema from database 300. Goldberg, 6:51-54. To assist a user in writing SQL language queries, the database schema access object retrieves and displays schema of the underlying database to the developer. Goldberg, 6:21-28. Based on the SQL queries created by the user (which are consistent with the database schema displayed to the user), the query object generator tool 300 causes generation of source code for a query object 308. Goldberg, 6:56-63. The generator tool of Goldberg receives query strings and parameter information from a user through the GUI. Goldberg, 8:65-67.

The Office Action cited column 6, lines 48-65, as teaching the emulation of a target database system in a test system using received environment information. 4/6/2005 Office Action at 4. As discussed above, the cited passage describes a GUI to present database schema

information to a user, and a query object generator tool to construct a query object. There is nothing in this cited passage to even remotely suggest *emulating* the target database system using received environment information. The Office Action did not provide any explanation regarding how Goldberg teaches such emulation.

Although Goldberg refers to generating test objects used with a test framework to generate a test GUI that can display and run queries in a query object (Goldberg, 6:66-7:5), the test framework described in Goldberg is used to generate a customized GUI to allow a user to view and manipulate a query object. The test framework "consists of" a test driver class that works as an application or a JAVA applet, a TestQOFrame class to generate a GUI window, and a RunQuery class to set up and run a query under control of buttons created on the test GUI display. Goldberg, 12:54-13:17. The test framework referred to in Goldberg enables the generation of a customized GUI to enable access and testing of a query object. However, creating this test framework does not constitute emulating a target database system in the test system using received environment information extracted from a target database system, as recited in claim 3.

Grey also fails to teach or suggest the emulation of a target database system in a test system using received environment information. The Office Action cited column 15, lines 35-38, of Grey as teaching environment information. The cited passage refers to configuration information provided by a user, via a graphical user interface, that specifies a desired operation of a Property Loader step, such as loading of property and/or variable values from a database. The loading of property and/or variable values from a database does not constitute emulating a target database system based on received environment information. Since neither Goldberg nor Grey even remotely suggests the emulating element of claim 3, it is respectfully submitted that the hypothetical combination of Goldberg and Grey does not teach or suggest all elements of a *prima facie* case of obviousness has not been established with respect to claim 3 over Goldberg and Grey.

Claims dependent from claim 1 are allowable for at least the same reasons.

Moreover, with respect to dependent claim 6, Goldberg fails to disclose a user interface having user-selectable options corresponding to types of environment information to extract from the target database system. The Office Action cited column 6, lines 40-51, of Goldberg as

teaching this element. The cited passage of Goldberg refers to the GUI of the query object generator tool that enables receipt of user-entered SQL strings and parameter information, and display of database schema. However, contrary to the assertion in the Office Action, there is absolutely no indication or suggestion by Goldberg that the GUI contains user-selectable options corresponding to *types of environment information* to extract from the target database system. The obviousness rejection of claim 6 is defective for at least this additional reason.

Moreover, dependent claim 11 (which depends indirectly from claim 3) recites presenting a user-selectable element that when activated enables editing of environment information. The Office Action cited column 6, lines 44-47, and column 9, lines 37-40, of Goldberg as teaching this element. The cited column 6 passage refers to the generator tool generating components of a query object and components of a database schema access object which allows the database schema to be displayed and provision of test objects which test the query. The cited column 9 passage relates to menu options such as "New," "Generate," "Add," and so forth. Neither passage even remotely suggests providing a user-selectable element that when activated enables editing of the environment information. Note that the Office Action has equated the schema information disclosed in Goldberg with environment information. There simply is no suggestion anywhere of providing a user the ability to edit the schema information in Goldberg.

Moreover, claim 13 (which depends indirectly from claim 3) recites storing received environment information in plural files, and presenting a user-selectable element that when activated causes the files to be combined. The Office Action cited column 6, lines 48-65, of Goldberg as teaching this recited feature of claim 13. The cited passage refers to the displaying of database schema information in a GUI. However, there is absolutely no indication or suggestion anywhere in Goldberg that the GUI includes a user-selectable element that when activated causes files storing received environment information to be *combined.* The obviousness rejection is defective for at least this additional reason.

Moreover, dependent claim 32 (which depends indirectly from claim 3) recites presenting a screen containing graphical user interface elements selectable by a user to select, for extraction, environment information associated *with tables referenced by a query.* The Office Action cited column 8, lines 40-50, of Goldberg as teaching this element. The cited column 8 passage describes the generator tool receiving information about a database to allow a user to formulate a

query and test the query. The cited passage also states that the generator tool can extract information form the database using a database schema access object 518. Nowhere within the cited passage is there any suggestion of presenting a screen containing graphical user interface elements selectable by a user to select for extraction environment information associated with *tables referenced by a query*. The obviousness rejection is defective for at least this additional reason.

With respect to dependent claim 33 (which depends from claim 3), the Office Action cited column 6, lines 50-65, and column 8, lines 40-51, of Goldberg as teaching that the environment information includes at least one of the listed information, including number of nodes in a target database system, number of processors per node, statistics, and random samples pertaining to demographics of data stored in the target database system. The cited column 6 passage refers to the obtaining of database schema from a database 300 for presentation to a user in a GUI. The cited column 8 passage also refers to the retrieval of database schema of an underlying database for presentation to the user. Neither passage teaches or suggests any of the listed types of environment information of claim 33. The environment information recited in claim 33 includes at least one of: *number of nodes* in the target database system, *number of processors* per node, *statistics*, and *random samples* pertaining to data *demographics* of data stored in the target database system. The database schema referred to in Goldberg does not contain the listed environment information of claim 33. The obviousness rejection of claim 33 is defective for at least this additional reason.

Claim 7 has been amended from dependent form to independent form, with the scope of the claim remaining *unchanged*. Claim 7 recites a method that includes presenting a user interface in a test system, which presents user-selectable options corresponding to types of environment information to extract from the target database system. The user-selectable options correspond to statistics information and cost parameters.

With respect to claim 7, the Office Action cited column 3, lines 60-65, of Goldberg as teaching the presenting of options corresponding to statistics information and costs parameters. The cited column 3 passage describes generating test objects that characterize query objects for testing purposes, and using information in the test objects with a test framework to install and

initialize a query object. No suggestion is made whatsoever in Goldberg of statistics information or cost parameters.

Grey also fails to teach or suggest presenting user-selectable options corresponding to types of environment information to extract from a target database system, where the presented options correspond to statistics information and cost parameters.

Therefore, the hypothetical combination of Goldberg and Grey does not teach or suggest all elements of the claim. A *prima facie* case of obviousness has therefore not been established with respect to claim 7.

Claims 38, 42, and 43 have each been amended from dependent form to independent form, with the scope of each claim remaining *unchanged*. Claims 38, 42, and 43 are allowable for reasons similar to those of claim 3.

Claim 44 has also been amended from dependent form to independent form, with the scope of the claim remaining *unchanged*. Claim 44 is allowable for reasons similar to those of claim 33. The amendment made to claim 44 is to improve form – the amendment does not narrow the scope of claim 44.

Dependent claims of independent claims 7, 38, 43, and 44 are allowable for at least the same reasons as corresponding independent claims.

Moreover, with respect to dependent claim 8 (which depends from claim 7), the Office Action cited column 10, lines 16-24, of Goldberg as teaching the presenting of a further option corresponding to data relating to definitions of relations. The cited column 10 passage describes a GUI main screen display that allows a user to define and examine one or more query objects, to change the definitions of query objects, and to manipulate the query objects. Definitions of query objects are not the same as definitions of *relations* as recited in claim 8. The obviousness objection of claim 8 is defective for at least this additional reason.

Moreover, with respect to dependent claim 9 (which depends from claim 8), the Office Action cited column 12, lines 39-42, of Goldberg as teaching the presenting of a further option corresponding to samples associated with access modules. The column 12 passage refers to a code generator object that generates interface code to allow a client to access the object and code which implements the object for a specific DBMS and transactional model. This does not

constitute samples associated with access modules. The obviousness objection of claim 9 is defective for at least this additional reason.

Moreover, claim 19 (which depends indirectly from claim 38) recites that one of the plural screens comprises a query selection element to select one or plural queries for which environment information is to be extracted. The Office Action cited column 6, lines 38-65, of Goldberg as disclosing this feature. The cited passage refers to a database schema access object that allows database schema to be displayed. The database schema is presented to a user by a GUI to aid the user in formulating a query that is consistent with the database's schema. Presenting a database schema to a user such that the user can formulate a query, as taught by Goldberg, is quite different from providing a screen of the user interface that includes a query selection element to select one of plural queries *for which environment information is to be extracted*, as recited in claim 19. There is no indication or suggestion whatsoever in Goldberg that its database schema is extracted for any selected one or plural queries based on a query selection element.

Claim 22 (which depends from claim 38) is allowable for reasons similar to claim 6.

Dependent claim 24 (which depends from claim 38) is allowable for reasons similar to claim 11.

Moreover, claim 25 (which depends from claim 24) recites user-selectable elements of a user interface that further includes an element to *undo editing* of environment information. As discussed above with respect to claim 24, Goldberg provides no teaching whatsoever of enabling editing of environment information. Clearly, then, Goldberg does not teach or suggest the provision of a user-selectable element to *undo editing* of environment information. The Office Action cited column 6, lines 44-47, and column 9, lines 37-40, as teaching the undo feature. The cited column 6 passage refers to a database schema access object to allow database schema to be displayed and test objects to test a query. The cited column 9 passage refers to menu options such as "new," "generate," and "add," "edit," "delete," "open," "save," "save as," "properties," and "exit." There is no indication at all that any of these menu options can be used to undo an edit of environment information.

Moreover, claim 36 (which depends indirectly from claim 3) recites visually displaying steps of the execution plan generated for a query based on emulated database environment

information created by emulating the target database system in the user interface. The Office Action cited column 8, lines 34-40, as teaching this feature. The cited passage refers to using a GUI to enable a user to operate interactively with a generator tool 500. There is absolutely no suggestion whatsoever in this passage of visually displaying steps of an execution plan in a user interface, where the execution plan is generated for a query based on an emulated database environment created by emulating a target database system.

Dependent claims 40 and 47 (which depend indirectly from claims 38 and 43, respectively) are similarly allowable.

Claim 37 (which depends from claim 36) recites that the emulated database environment comprises plural storage modules and plural access module processors to access, in parallel, respective storage modules, and where generating the execution plan for a query based on the emulated database environment created by emulating the target database system includes generating the execution plan for execution by the plural access module processors. The Office Action cited column 6, lines 30-59, of Goldberg as disclosing this feature. The cited passage in column 6 of Goldberg does not refer whatsoever to an emulated database environment that has plural storage modules and plural access module processors.

In view of the foregoing, allowance of all claims is respectfully requested.

The Commissioner is authorized to charge any additional fees and/or credit any overpayment to Deposit Account No. 14-0225 (9749).

Respectfully submitted,

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